

CLAIMS

1. (Amended) A melt formed tetrafluoroethylene-hexafluoropropylene copolymer containing 1.0×10^{14} spins/g or less of unpaired electrons on the carbon atoms in terms of a spin density measured with electron spin resonance at a temperature of 10K and 50 ppm or less of a basic component.

Sub D2 2. (Amended) The melt formed tetrafluoroethylene-hexafluoropropylene copolymer according to claim 1, wherein said amount of the unpaired electron on the carbon atoms is 1.0×10^{13} spins/g or less in terms of a spin density measured with electron spin resonance at a temperature of 10K and 50 ppm or less of a basic component.

3. (Cancelled)

4. (Amended) The melt formed tetrafluoroethylene-hexafluoropropylene copolymer according to claim 1 or 2, which is obtained by adding 0.1 to 10 % of a compound comprising an alkali metal or an alkaline earth metal in terms of the number of atoms of the alkali metal or the alkaline earth metal based on the total number of the above terminal groups, 0.1 to 10 % of ammonia in terms of the number of ammonia molecules based on the total number of the above terminal groups, or 0.1 to 10 % of a compound having an ammonium group in terms of the number of the ammonium groups based on the total number of the above terminal groups to the tetrafluoroethylene-hexafluoropropylene copolymer, and heating the tetrafluoroethylene-hexafluoropropylene copolymer at a temperature of at least 200°C in an atmosphere containing moisture.

5. (Cancelled)

a Sub D4
6. (Amended) The melt formed tetrafluoroethylene-^{claim 1 or 2}hexafluoropropylene copolymer according to ~~claim 1, 2 or 4~~, wherein said fluorine-containing copolymer has a melt viscosity of 0.1 to 100 kPa·s at 372°C.

5 7. A method for stabilizing a fluorine-containing polymer having terminal carboxylic acid groups or terminal groups that generate the terminal carboxylic acid groups on heating at a temperature of at least 200°C comprising the steps of:

adding 0.1 to 10 % of a compound comprising an alkali metal
10 or an alkaline earth metal in terms of the number of atoms of the alkali metal or the alkaline earth metal based on the total number of the above terminal groups, 0.1 to 10 % of ammonia in terms of the number of ammonia molecules based on the total number of the above terminal groups, or 0.1 to 10 % of a compound having
15 an ammonium group in terms of the number of the ammonium groups based on the total number of the above terminal groups to the fluorine-containing polymer, and

heating the fluorine-containing polymer at a temperature of at least 200°C in an atmosphere containing moisture.

20 8. The method according to claim 7, wherein the above added amount of from 0.2 to 5 %.

9. (Amended) The method according to claim 7, wherein said tetrafluoroethylene-hexafluoropropylene copolymer is stabilized after it is dried.

5 Sub B 25 10. The method ~~according~~ to claim 7 or 8, wherein

11. (Cancelled)

12. (Amended) The method according to ^{claim 7}~~any one of claims 7 to 10~~, wherein the heating is carried out in the presence of

oxygen.

13. (Amended) The method according to claim ⁷~~41~~, wherein the melt kneading is carried out at a residence time of at least 10 minutes with a kneader which has a usable volume ratio (usable space in a container/space in a container) of at least 0.3 and a power factor K of less than 8,000, when the power factor K is expressed by the following formula:

$$K = Pv/\mu/n^2$$

wherein Pv is a power requirement per unit volume (W/m³), μ is a melt viscosity (Pa.s) and n is a rotation speed (rps).

14. The method according to claim 13, wherein said kneader is a twin-screw kneader having a self-cleaning mechanism and piston-flow properties.

15. (Amended) The method according to ^{claim 7 or 12}~~any one of claims 7 to 10 and 12 to 14~~, wherein said fluorine-containing polymer is one prepared by emulsion or suspension polymerization.

16. (Amended) The method according to ^{claim 7 and 12}~~any one of claims 7 to 10 and 12 to 15~~, wherein said fluorine-containing polymer is a copolymer of at least two monomers selected from the group consisting of tetrafluoroethylene, hexafluoropropylene, perfluoroalkyl vinyl ethers, ethylene, vinylidene fluoride and chlorotrifluoroethylene, a tetrafluoroethylene, a vinylidene fluoride homopolymer and a chlorotrifluoroethylene homopolymer.

17. (Amended) The method according to ^{claim 7 and 12}~~any one of claims 7 to 10 and 12 to 16~~, wherein said fluorine-containing polymer is a tetrafluoroethylene-hexafluoropropylene copolymer, a tetrafluoroethylene-perfluoroalkyl vinyl ether copolymer or a tetrafluoroethylene-hexafluoropropylene-perfluoroalkyl vinyl

(Amendment under PCT Art. 34)
19

ether copolymer, and has a melt viscosity of 0.1 to 100 kPa·s
at 372°C.

000000 5522500